SPECIFYING MESSAGING SESSION SUBJECT PREFERENCES

CROSS-REFERENCE TO RELATED APPLICATIONS

The present application is related to the following copending applications, which are filed on even date herewith and incorporated herein by reference:

(1) U.S. Patent Application Serial No. ___/_____ (Attorney Docket No. AUS920010391US1);

(2) U.S. Patent Application Serial No. ___/_____ (Attorney Docket No. AUS920010392US1);

(3) U.S. Patent Application Serial No. ___/_____ (Attorney Docket No. AUS920010393US1);

(4) U.S. Patent Application Serial No. ___/_____ (Attorney Docket No. AUS920010394US1);

(5) U.S. Patent Application Serial No. ___/_____ (Attorney Docket No. AUS920010396US1);

(6) U.S. Patent Application Serial No. ___/_____ (Attorney Docket No. AUS920010397US1); and

(7) U.S. Patent Application Serial No. ___/_____ (Attorney Docket No. AUS920010528US1).

BACKGROUND OF THE INVENTION

1. Technical Field:

The present invention relates in general to electronic communications and, in particular, to specifying messaging session subject preferences. Still more particularly, the present invention relates to alerting a user when current messaging sessions contain subjects preferred by the user and providing the user with an activity level associated with messaging sessions containing subjects preferred by the user.

2. Description of the Related Art:

As the Internet and telephony expand, the ease of communications between individuals in different locations continues to expand as well. One type of electronic communication is supported by messaging which includes the use of computer systems and data communication equipment to convey messages from one person to another, as by e-mail, voice mail, unified messaging, instant messaging, or fax.

While electronic mail (e-mail) has already expanded into nearly every facet of the business world, other types of

messaging continue to forge into use. For example, instant
messaging systems are typically utilized in the context of an
Internet-supported application that transfers text between
multiple Internet users in real time.

In particular, the Internet Relay Chat (IRC) service is one
example of instant messaging that enables an Internet user to
participate in an on-line conversation in real time with other
users. An IRC channel, maintained by an IRC server, transmits
the text typed by each user who has joined the channel to the
other users who have joined the channel. An IRC client shows the
names of the currently active channels, enables the user to join
a channel, and then displays the other channel participant's
words on individual lines so that the user can respond.

Similar to IRC, chat rooms are often available through on-
line services and provide a data communication channel that links
computers and permits users to converse by sending text messages
to one another in real-time.

In current instant messaging systems, multiple topics of
conversation may take place within a single channel, particularly
where the channel is designated for a broad subject. This can
occur easily where, for example, multiple users select a
particular channel that is designated for discussion of movies
and a discussion begins about a first movie. Then, as additional
users enter the channel or current users want to move onto
discussion of a second movie, discussions of the first and second
movie may intermingle in a single thread of conversation.

As more and more subjects are discussed within a single channel, it typically becomes increasingly more difficult to follow comments being made. In addition, as more subjects are discussed within a single channel, it becomes increasing more difficult for a user to select a channel with subjects of interest to the user where those subjects are not readily identified.

Further, some channels may be utilized more often than others, however a user must open each channel to view the activity therein. Where a user would preferably like to follow multiple channels, current messaging systems are limited in that a user must actively open each channel in order to view the current message entries.

In view of the foregoing, it would be advantageous to provide a method, system and program for allowing users to specify subject preferences such that when a conversation thread about a subject preferences in a messaging session is initiated or in progress, a user is notified of that channel, topic and message entry. In addition, it would be advantageous to provide a method, system and program for providing indicators of the activity level of channels and topics including subject preferences of a user.

SUMMARY OF THE INVENTION

In view of the foregoing, it is therefore an object of the present invention to provide an improved method, system and program for performing electronic communications.

It is another object of the present invention to provide a method, system and program for specifying messaging session subject preferences.

It is yet another object of the present invention to provide a method, system and program for alerting a user when current messaging sessions contain subjects preferred by the user and providing the user with an activity level associated with messaging sessions containing subjects preferred by the user.

According to one aspect of the present invention, multiple current messaging sessions are filtered according to subject preferences for a user. The user is then notified of a selection from among the current messaging sessions correlating to subject preferences for the user, such that the user is enabled to monitor conversations comprising the subject preferences across multiple messaging sessions. In addition, the user may be separately notified of activity levels associated with subject preferences for the user.

All objects, features, and advantages of the present
invention will become apparent in the following detailed written
description.

BRIEF DESCRIPTION OF THE DRAWINGS

The novel features believed characteristic of the invention are set forth in the appended claims. The invention itself however, as well as a preferred mode of use, further objects and advantages thereof, will best be understood by reference to the following detailed description of an illustrative embodiment when read in conjunction with the accompanying drawings, wherein:

Figure 1 depicts one embodiment of a computer system with which the method, system and program of the present invention may advantageously be utilized;

Figure 2 illustrates a simplified block diagram of a client/server environment in which electronic messaging typically takes place in accordance with the method, system and program of the present invention;

Figure 3 depicts a block diagram of one embodiment of a messaging server in accordance with the method, system and program of the present invention;

Figure 4 illustrates a graphical representation of a subject preference interface in accordance with the method, system and program of the present invention;

Figure 5 depicts a graphical representation of multiple messaging session windows and current preferred subjects in accordance with the method, system and program of the present invention;

Figure 6 illustrates a high level logic flowchart of a process and program for notifying users when messaging sessions include subject preferences in accordance with the method, system, and program of the present invention; and

Figure 7 depicts a high level logic flowchart of the process and program for detecting and distributing activity level notifications in accordance with the method, system, and program of the present invention.

DETAILED DESCRIPTION OF THE PREFERRED EMBODIMENT

A method, system and program for enabling users to specify subject preferences and then alerting those users when messaging sessions containing subject preferences are initiated or in progress are provided. In addition, the method, system and program provide indicators to the user of the activity levels of messaging sessions containing subject preferences preferred by the user. In the present invention, "subject preferences" preferably refers to a subject matter that is typically referred to by a textual word or words, however may also include audible signals and graphical representations of a subject matter. Subjects defined within a user's subject preferences may be referenced by a channel, topic, message entry or other user.

A "messaging session" preferably includes, but is not limited to, any combination of voice, graphical, video, and/or text messages, instant and/or delayed, transmitted between multiple users via a network. Messaging sessions may include use of chat rooms, instant messages, e-mail, IRC, conference calling and other network methods of providing a channel for users to communicate within. Further, messaging sessions may include communications such as voice, video, and text transmissions between multiple telephony devices.

In the following description, for the purposes of explanation, numerous specific details are set forth in order to provide a thorough understanding of the present invention. It will be apparent, however, to one skilled in the art that the

present invention may be practiced without these specific
details. In other instances, well-known structures and devices
are shown in block diagram form in order to avoid unnecessarily
obscuring the present invention.

HARDWARE OVERVIEW

The present invention may be executed in a variety of
systems, including a variety of computing systems and electronic
devices under a number of different operating systems. In one
embodiment of the present invention, the messaging system is a
portable computing system such as a notebook computer, a palmtop
computer, a personal digital assistant, a telephone or other
electronic computing system that may also incorporate
communications features that provide for telephony, enhanced
telephony, messaging and information services. However, the
messaging system may also be, for example, a desktop computer, a
network computer, a midrange computer, a server system or a
mainframe computer. Therefore, in general, the present invention
is preferably executed in a computer system that performs
computing tasks such as manipulating data in storage that is
accessible to the computer system. In addition, the computer
system preferably includes at least one output device and at
least one input device.

Referring now to the drawings and in particular to **Figure 1**,
there is depicted one embodiment of a computer system with which
the method, system and program of the present invention may
advantageously be utilized. Computer system **10** comprises a bus

22 or other communication device for communicating information within computer system **10**, and at least one processing device such as processor **12**, coupled to bus **22** for processing information. Bus **22** preferably includes low-latency and high-latency paths that are connected by bridges and controlled within computer system **10** by multiple bus controllers.

Processor **12** may be a general-purpose processor such as IBM's PowerPC™ processor that, during normal operation, processes data under the control of operating system and application software stored in a dynamic storage device such as random access memory (RAM) **14** and a static storage device such as Read Only Memory (ROM) **16**. The operating system preferably provides a graphical user interface (GUI) to the user. In a preferred embodiment, application software contains machine executable instructions that when executed on processor **12** carry out the operations depicted in the flowcharts of **FIGS. 6, 7,** and others described herein. Alternatively, the steps of the present invention might be performed by specific hardware components that contain hardwire logic for performing the steps, or by any combination of programmed computer components and custom hardware components.

The present invention may be provided as a computer program product, included on a machine-readable medium having stored thereon the machine executable instructions used to program computer system **10** to perform a process according to the present invention. The term "machine-readable medium" as used herein

includes any medium that participates in providing instructions

to processor **12** or other components of computer system **10** for

execution.   Such a medium may take many forms including, but not

limited to, non-volatile media, volatile media, and transmission

media.   Common forms of non-volatile media include, for example,

a floppy disk, a flexible disk, a hard disk, magnetic tape or any

other magnetic medium, a compact disc ROM (CD-ROM) or any other

optical medium, punch cards or any other physical medium with

patters of holes, a programmable ROM (PROM), an erasable PROM

(EPROM), electrically EPROM (EEPROM), a flash memory, any other

memory chip or cartridge, or any other medium from which computer

system **10** can read and which is suitable for storing

instructions.   In the present embodiment, an example of non-

volatile media is storage device **18**.   Volatile media includes

dynamic memory such as RAM **14**.   Transmission media includes

coaxial cables, copper wire or fiber optics, including the wires

that comprise bus **22**.   Transmission media can also take the form

of acoustic or light waves, such as those generated during radio

wave or infrared data communications.

Moreover, the present invention may be downloaded as a

computer program product, wherein the program instructions may be

transferred from a remote computer such as a server **39** to

requesting computer system **10** by way of data signals embodied in

a carrier wave or other propagation medium via a network link **34**

(e.g., a modem or network connection) to a communications

interface **32** coupled to bus **22**.   Communications interface **32**

provides a two-way data communications coupling to network link

34 that may be connected, for example, to a local area network

(LAN), wide area network (WAN), or as depicted herein, directly

to an Internet Service Provider (ISP) 37. In particular, network

link 34 may provide wired and/or wireless network communications

to one or more networks.

ISP 37 in turn provides data communication services through

the Internet 38 or other network. Internet 38 may refer to the

worldwide collection of networks and gateways that use a

particular protocol, such as Transmission Control Protocol (TCP)

and Internet Protocol (IP), to communicate with one another. ISP

37 and Internet 38 both use electrical, electromagnetic, or

optical signals that carry digital data streams. The signals

through the various networks and the signals on network link 34

and through communication interface 32, which carry the digital

data to and from computer system 10, are exemplary forms of

carrier waves transporting the information.

Further, multiple peripheral components may be added to

computer system 10. For example, an audio output 28 is attached

to bus 22 for controlling audio output through a speaker or other

audio projection device. A display 24 is also attached to bus 22

for providing visual, tactile or other graphical representation

formats. A keyboard 26 and cursor control device 30, such as a

mouse, trackball, or cursor direction keys, are coupled to bus 22

as interfaces for user inputs to computer system 10. In

alternate embodiments of the present invention, additional input

and output peripheral components may be added.

MESSAGING SYSTEMS CONTEXT

With reference now to **Figure 2**, there is depicted a
simplified block diagram of a client/server environment in which
electronic messaging typically takes place in accordance with the
method, system and program of the present invention. The
client/server environment is implemented within multiple network
architectures. For example, the architecture of the World Wide
Web (the Web) follows a traditional client/server modeled
environment.

The terms "client" and "server" are used to refer to a
computer's general role as a requester of data (the client) or
provider of data (the server). In the Web environment, web
browsers such as Netscape Navigator typically reside on client
messaging systems **40a-40n** and render Web documents (pages) served
by at least one messaging server such as messaging server **42**.
Additionally, each of client messaging systems **40a-40n** and
messaging server **42** may function as both a "client" and a
"server" and may be implemented utilizing a computer system such
as computer system **10** of **Figure 1**. Further, while the present
invention is described with emphasis upon messaging server **42**
controlling a messaging session, the present invention may also
be performed by client messaging systems **40a-40n** engaged in peer-
to-peer network communications via a network **44**.

The Web may refer to the total set of interlinked hypertext
documents residing on servers all around the world. A network

44, such as the Internet, provides an infrastructure for transmitting these hypertext documents between client messaging systems **40a-40n** and messaging server **42**. Documents (pages) on the Web may be written in multiple languages, such as Hypertext Markup Language (HTML) or Extensible Markup Language (XML), and identified by Uniform Resource Indicators (URIs) that specify the particular messaging server **42** and pathname by which a file can be accessed, and then transmitted from messaging server **42** to an end user utilizing a protocol such as Hypertext Transfer Protocol (HTTP). Web pages may further include text, graphic images, movie files, and sounds as well as Java applets and other small embedded software programs that execute when the user activates them by clicking on a link.

Advantageously, in the present invention, a user enters a message via one of messaging input/output (I/O) devices **46a-46n** for a messaging session at a client messaging system such as client messaging system **40a**. The message entry is transmitted to messaging server **42** in association with a particular channel and further associated with a particular topic within the particular channel. Messaging server **42** then distributes the message entry to client messaging systems **40a-40n** where users are participating in the channel. In addition, messaging server **42** compares keywords within the message entry with subject preferences for multiple users and alerts users to the message entry who have subject preferences matching the keywords in the message entry.

In addition, in the present invention, a user may request a new topic in association with a particular channel via a client messaging system. Messaging server **42** may accept the topic request and then compare the topic request with subject preferences of multiple users. If the topic matches a subject preference of a user, that user is alerted that the subject has been initiated.

Moreover, in the present invention, some users may remain connected to network **44** continuously via one of client messaging systems **40a-40n**. However, other users may periodically access network **44** to participate in messaging sessions via messaging server **42**. In response to a user logging in to messaging server **42**, messaging server **42** preferably compares the current channels, topics, message entries, and users with the user's subject preferences and alerts the user of subjects already in progress.

Messaging server **42** also preferably monitors the activity level of each channel, topic and user participating in a messaging session. The activity levels are filtered according to activity subjects preferred by each user and then transmitted to client messaging systems **40a-40n**. The activity subjects preferred by each user may be the same as those included within the user's subject preferences or may include an alternate selection of subjects.

While in the present embodiment messaging server **42** handles transmission of message entries, subject preference notifications

and activity levels; in alternate embodiments, subject preference notifications and activity levels may be accessible to client messaging systems **40a-40n** as files in a directory accessible to a user.   In addition, the subject preference notifications and activity levels may be transmitted as e-mail to participants in the messaging session, where the e-mail application functioning on the client messaging system automatically determines that the e-mail contains subject preference notifications and activity levels and outputs the subject preference notifications and activity levels according to user preferences.   Moreover, the present invention may utilize a traditional IRC channel for transmitting message entries and a special IRC device channel opened in parallel with the traditional IRC channel for transmitting the subject preference notifications and activity levels among users.   Furthermore, other types of messaging systems may be utilized to implement the present invention, as will be understood by one skilled in the art.

Advantageously, the steps performed by message server **42** may also be performed by an application executing in each of client messaging systems **40a-40n,** such as client applications **41a-41n,** particularly where client messaging systems **40a-40n** are communicating in a peer-to-peer network.

Referring now to **Figure 3**, there is illustrated a block diagram of one embodiment of a messaging server in accordance with the method, system and program of the present invention. As depicted, messaging server **50** includes a messaging controller **62**

that is provided to control the process steps of messaging server
50 as will be further described.

Messaging server **50** also includes multiple channels **52a-52n**.
Each of channels **52a-52n** may represent a separate information
path within messaging server **50**. Messaging server **50** may have a
defined number of channels **52a-52n** or may allow users to create
new channels as needed.

Each of channels **52a-52n** preferably includes multiple
topics. In the present example, channel **52a** includes topics **54a-
54n** and channel **52n** includes topics **56a-56n**. Messaging server **50**
may have a finite number of topics that may be pre-defined for
each channel or may allow users to created new topics as needed.

In addition, each of channels **52a-52n** preferably includes a
table of current users **58a-58n**. As a user selects to participate
in channels **52a-52n**, the user's identification is added to the
table of current users **58a-58n** for that channel. In particular,
the table of current users **58a-58n** may further specify
participation in a selection of topics from among the topics
available in a selected channel.

Preferably, as messaging server **50** receives messages, they
are stored according to the channel, topic and user and then
distributed to each of the users participating in that channel.
Further, messaging server **50** may distribute messages to users
participating in a channel and more specifically participating in

a particular topic or topics within a channel.

Messaging server **50** includes a user profiles database **60**
that includes profile information for each user including, but
not limited to, a user identification, a name, an electronic mail
(e-mail) address, subject preferences, and a user history
recorded as the user participates in messaging services. The
user identification stored in user profiles **60** during
registration is utilized across multiple channels for identifying
messages posted by that user. In addition, a user may have a
single "screen name" or other textual identifier or multiple
"screen names" to identify a single user. Further, user profile
information for each user may be stored at each client messaging
system and accessed by messaging server for temporary storage in
user profiles database **60** while a user is logged into messaging
server **50**.

In particular, the user history included in user profiles
database **60** may include a history of channels and topics that
have been initiated by the user or that the user has participated
in. Advantageously, messaging server **50** may determine a
selection of messaging channels and topics that a user frequently
initiates or participates in and provide those topics in the form
of selectable outputs such that the user may quickly select from
frequently discussed topics. Further, the user may designate
topics that are frequently discussed or that the user prefers to
have available in a reference list or other selectable output.

In addition, messaging server **50** determines when channels, topics and message keywords are initiated or in progress that match the subject preferences of channel, topic, and keyword preferences included in user profiles database **60**. Subject preferences include preferred methods of alerting the user of channels, topics and keywords matching subject preferences that are utilized to transmit subject preference notifications. Further, subject preferences may be distinguished according to the device a user is utilizing to log in to messaging server **50**.

Each of channels **52a-52n** further includes channel options **64a-64n**. Channel options may include, but are not limited to, distinguishing users, distinguishing topics, selecting users to show, selecting topics to show, saving threads by user, saving threads by topic, adding topics, and deleting topics. The channel options for each channel may be pre-determined by message server **50** or may be available for users to define when a channel and/or topic is added. By defining the channel options and more specifically by defining options for individual topics within a channel, the options given to users for customizing outputs may be controlled.

A messaging controller **62** is advantageously a software application executing within messaging server **50** in order to determine the current channels, topics, and keywords that match subjects preferences and alerts users to current channels, topics, and keywords that match subject preferences. Further, messaging controller **62** specifies how each user is alerted to

current channels, topics, and keywords according to subject

preferences. Alternatively, software executing on the client

system may specify how a user is alerted to current channels,

topics, and keywords according to subject preferences.

Referring now to **Figure 4**, there is illustrated a graphical

representation of a subject preference interface in accordance

with the method, system and program of the present invention. As

depicted, a device block **72** is depicted in a subject preferences

window **70** for indicating which device the current subject

preferences are set for. In the present embodiment, the device

that the subject preferences are set for is titled "work

computer", which preferably references a particular device among

multiple devices a user may utilize.

In addition, a selectable button **74** is illustrated within

subject preferences window **70**. In response to a user selection

of selectable button **74**, a user is enabled to add or edit

preferred subjects by keyword, topic and/or channel. In

addition, a user may specify preferences for notification

according to subject.

A current preference selection **76** depicts the current

subject preferences specified by the user. For example, when the

subject "G241 PROJECT" is a current channel, topic, or keyword,

the user has specified to be notified by a "ping" and a new

window into the associated channel. In another example, when the

subject "lunch" is a current topic or keyword in channels C or F,

the user has specified to be notified by an icon and a new window into the associated channel.

With reference now to **Figure 5**, there is depicted a graphical representation of multiple messaging session windows and current preferred subjects in accordance with the method, system and program of the present invention. As illustrated, a graphical user interface **78** for a particular user is depicted. Within graphical user interface **78**, a channel A window **80** is illustrated including a messaging session **82** for channel A, including all topics within channel A. In addition, channel A window **80** includes a list of current users in the channel as depicted at reference numeral **84** and a list of current topics in the channel as illustrated at reference numeral **86**. As users request to participate in a channel or are requested by other users to participate in the channel, user identifications are added to the list of current users in the channel. In addition, as topics are added to the channel, those topics are added to the list of current topics in the channel.

Graphical user interface **78** also depicts a channel C window **90**. Channel C window **90** includes a messaging session **92** for "lunch" only. In addition, channel C window **90** includes a list of current users in the channel as illustrated at reference numeral **94** and a list of current topics in the channel as depicted at reference number **96**. As illustrated, advantageously, a user may participate in multiple messaging sessions at the same time.

A subject preferences window **100** is also illustrated within graphical user interface **78**. Subject preference window **100** includes references to multiple messaging sessions pertaining to the subject preferences of a user. In the present example, the user has indicated a preference for the subject "movie #1". A reference to a first messaging session **102** indicates that the subject "movie #1" is a keyword in a message entry within the channel. A reference to a second messaging session **103** indicates that the subject "movie #1" is a topic in channel E.

In addition, in the present example, the user has indicated a preference for the subject "lunch" in channel C. A reference to a third messaging session **104** indicates that the subject "lunch" is a topic within channel C. In particular, in response to a user selection from first messaging session **102**, second messaging session **103**, and third messaging session **104**, a new window is preferably opened to the portion of the channel referencing the subject preference.

In particular, in addition to subject preferences window **100**, additional notifications are preferably illustrated within graphical user interface **78** according to the user's subject preferences as depicted in **Figure 4**. For example, since "movie #1" is included in channel A, then "movie sound file #1" is preferably initiated as a notification. In addition, since "lunch" is included in channel C, a lunch icon **106** is included in the display area. In addition, channel C window **90** is opened including only the topic "lunch" from among many topics within

channel C.

Additionally, graphical user interface **78** includes an
activity window **130** for depicting the activity levels detected
according to channel, topic, user, and other criteria that may be
designated by the user. By depicting activity levels within
activity window **130**, a user may track the current levels of
participation in particular channels and topics or by particular
users of interest utilizing a activity rate. In particular,
tracking activity levels is particularly advantageous in that a
user may view an indicator of activity without requiring a
separate window that displays the actual message entries entered
in a particular channel or topic or by a particular user.

In particular, the activity depicted in activity window **130**
may include subject preferences for a user, however may also
include channels, topics, and users that are selected by the user
independent of subject preferences. For example, a user may drag
and drop channel names, users and topics into activity window **130**
for tracking. In an alternate method, a user may select from a
directory of channels, topics, keywords, and users to be included
in activity window **130**. In addition, the activity depicted in
activity window **130** may include, but is not limited to, number of
entries per minute, most recently used, least recently used,
bytes per minute, and other criteria for measuring activity that
may be selected by the user. A user may select one of the
indicators of activity within activity window 130 in order to
request additional activity information, adjust preferences for

the activity subject and/or initiate a new window for the
subject.

In the present example, first, a general activity indicator
132 is illustrated representing the general activity level of
message entries for channel A. In addition, the activity for
topics "lunch" and "project X" are indicated respectively by
lunch activity indicator **134**, project X activity indicator **136**.
"Family" is a title the user has associated with a group of user
identifications. In the present example, activity by users in
the group "family" is indicated by family activity indicator **138**.

Activity for topic "movie #1" in the present example
provides a single cumulative indicator of activity across
multiple channels. In particular, movie #1 indicator **140**
references the cumulative channel activity for movie #1.
Advantageously, if a user selects movie #1 indicator **140**, the
user may view the activity separated according to channel. In
addition, while in the present embodiment, the activity for each
instance of a topic is cumulatively depicted, in alternate
embodiments, activity for a single topic discussed in multiple
channels may be illustrated separately.

In particular, in representing activity levels, a graphical
indicator such as those depicted in activity window **130** may be
utilized where a length and size of a graphical bar increases to
indicate increased activity. In addition, graphical indicators
may be utilized including, but not limited to, translucency,

light-emitting diode (LED) bars, and sorting according to user-defined criteria. In particular, graphical indicators may be sorted according to number of entries, number of bits, most recently used, and other criteria.

Referring now to **Figure 6**, there is illustrated a high level logic flowchart of a process and program for notifying users when messaging sessions include subject preferences in accordance with the method, system, and program of the present invention. As depicted, the process starts at block **110** and thereafter proceeds to block **112**. Block **112** illustrates a determination as to which event occurred when an event occurs. If a new channel, topic or message is received, then the process passes to block **114**. If a user logs on to the messaging server, then the process passes to block **120**.

Block **114** depicts filtering the new channel, topic or message according to the subject preferences of current users. In particular, new channels, topics, and messages may be filtered further according to channel options such that each user will only be notified of current subjects accessible to each user. Next, block **116** illustrates notifying users with subject preferences for the new channel, topic or message, and the process ends.

Block **120** illustrates filtering the current channels, topics and messages according to subject preferences of the new user. Next, block **122** depicts notifying the new user of channels,

topics or messages containing subjects preferred by the new user, and the process ends.

With reference now to **Figure 7**, there is illustrated a high level logic flowchart of the process and program for detecting and distributing activity level notifications in accordance with the method, system, and program of the present invention. As depicted, the process starts at block **150** and thereafter proceeds to block **152**.

Block **152** illustrates detecting the activity according to multiple factors for each channel, topic, keyword and user. Next, block **154** depicts filtering the activity according to each current user's activity preferences. In addition, the activity may be filtered according to activity preferences for system administrators and other users enabled to access the messaging system while not participating in messaging sessions. For example, a manager may be authorized to monitor the activity for particular employees such that the manager may join messaging sessions where particular employees are particularly active. Thereafter, block **156** illustrates distributing the current activity levels to the current users according to each user's preferences, and the process ends.

While the invention has been particularly shown and described with reference to a preferred embodiment, it will be understood by those skilled in the art that various changes in form and detail may be made therein without departing from the spirit and scope of the invention.